

AMENDMENTS TO THE CLAIMS

The following is a copy of Applicants' claims that identifies language being added with underlining ("___") and language being deleted with strikethrough ("~~---~~"), as is applicable:

1. (Previously Presented) An ink jet printing apparatus for printing an image on wide format flexible substrate, comprising: a substrate and a mechanism for moving the substrate in first direction, a print head and a mechanism for moving the print head in second direction, image position detecting means for detecting image on substrate position, and a control computer, characterized in that errors in said image and substrate positions are corrected by adapting the geometry and position of the currently printed swath to the geometry and position of the adjacent earlier printed image swath.
2. (Previously Presented) The apparatus of claim 1, characterized in that said image and substrate position detecting means measure the currently printed image on substrate position relative to the earlier printed image (swath).
3. (Previously Presented) The apparatus of claim 1, characterized in that the control computer calculates the deviation of the current image on substrate position relative to the previous swath position and generates a correction value.
4. (Previously Presented) The apparatus of claim 1, characterized in that for correction of said image position error said print head is moved in said first direction in accordance with said image position correction value.
5. (Previously Presented) The apparatus of claim 1, characterized in that for correction of said image position error the print data is shifted between inner and peripheral nozzles of said print head in said first printing direction in accordance with said image position correction value.

6. (Previously Presented) The apparatus of claim 1, characterized in that said print head prints the image position control marks concurrently with image printing and said image position control marks define the geometry and position of said printed swath on said substrate.
7. (Previously Presented) The apparatus of claim 1, characterized in that said print head prints said image position control marks concurrently with the image printing and places the image position control marks in places consisting of one of a group of image free areas and image areas.
8. (Previously Presented) The apparatus of claim 1, characterized in that said control marks are printed by ink consisting of one of a group visible ink, invisible ink or magnetic.
9. (Previously Presented) A method of multi pass inkjet image printing on wide format flexible substrates, comprising moving a substrate in first printing direction and scanning the substrate by reciprocally moving a print head in second printing direction, characterized in that errors in said substrate movement are corrected by adapting the geometry and position of the next printed swath to the geometry and position of the adjacent earlier printed image swath.
10. (Previously Presented) The method of claim 9, characterized in that said geometry and position of the next printed swath is adapted to said geometry and position of the adjacent earlier printed image swath by moving said print head in first direction.
11. (Previously Presented) The method of claim 9, characterized in that said geometry and position of the next printed swath is adapted to said geometry and position of the adjacent earlier printed image swath by shifting data between the inner and peripheral nozzles of said print head in the first direction.
12. (Previously Presented) The method of claim 9, characterized in that the coordinates of said control marks determine the geometry and position of the image.

13. (Previously Presented) The method of claim 9, characterized in that said image position detecting means measure the image and substrate position.

14. (Previously Presented) The method of claim 9, characterized in that said control computer calculates the deviation of the current image on substrate position from the adjacent earlier printed image on substrate position and generates the correction value.

15. (Previously Presented) A method of multi pass inkjet printing on wide format flexible substrate, characterized in that distortions of the geometry of a wide format flexible substrate are compensated by adapting the geometry and position of the printed swath to the geometry and position of the adjacent earlier printed image swath.

16. (Previously Presented) A method of multi pass inkjet printing on wide format flexible substrate, characterized in that distortions of the geometry of a wide format flexible substrate are compensated by distributing the movement in one direction between the print head that performs small and accurate movements and flexible substrate that performs coarse movement.

17. (Previously Presented) An ink jet printing apparatus for printing an image on wide format flexible substrates, comprising: a substrate and a mechanism for moving the substrate in first direction, a print head, a mechanism for moving the print head in second direction, position detecting means for detecting actual image and substrate position and control computer, characterized in that said print head makes small incremental movement in said first direction and errors in said substrate position are corrected by dividing the movement in said first direction between coarse movement performed by said substrate and accurate movement of said print head.

18. (Previously Presented) The apparatus of claim 17, characterized in that said image position detecting means measure the image on substrate position relative to the adjacent earlier printed image.

19. (Previously Presented) The apparatus of claim 17, characterized in that said image position detecting means are one of a group of electro-optical, magnetic or contact roller means.

20. (Previously Presented) The apparatus of claim 17, characterized in that the control computer calculates the deviation of the printed image swath relative to the previously printed swath and generates a correction value.

21. (Previously Presented) The apparatus of claim 17, characterized in that for correction of said substrate position error said print head is moved in said first printing direction in accordance with said swath position correction value.

22. (Previously Presented) The apparatus of claim 17, characterized in that said print head prints the image position control marks concurrently with image printing and said marks define the geometry and position of said printed swath on said substrate.

23. (Previously Presented) The apparatus of claim 17, characterized in that said control marks are printed by ink consisting of one of a group visible ink or invisible ink.

24-26. (Canceled).